

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference 110/03833	FOR FURTHER ACTION		See item 4 below
International application No. PCT/IL2004/000923	International filing date (<i>day/month/year</i>) 06 October 2004 (06.10.2004)	Priority date (<i>day/month/year</i>) 07 October 2003 (07.10.2003)	
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237			
Applicant DISC-O-TECH MEDICAL TECHNOLOGIES, LTD.			

1.	This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 <i>bis</i> .1(a).																								
2.	This REPORT consists of a total of 6 sheets, including this cover sheet. In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.																								
3.	<p>This report contains indications relating to the following items:</p> <table style="width: 100%;"> <tr> <td style="width: 10%; text-align: center;"><input checked="" type="checkbox"/></td> <td style="width: 30%;">Box No. I</td> <td style="width: 60%;">Basis of the report</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table>	<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
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4.	The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).																								

<p style="text-align: center;">The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland</p> <p>Facsimile No. +41 22 740 14 35</p>	<p>Date of issuance of this report 10 April 2006 (10.04.2006)</p> <p>Authorized officer Simin Baharlou</p> <p>Telephone No. +41 22 338 71 30</p>
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PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:
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FENSTER & COMPANY, INTELLECTUAL PROPERTY
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P O. BOX 10256
PETACH TIKVA, ISRAEL 49002

PCT

REC'D 17 MAY 2005

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WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Applicant's or agent's file reference 110/03833		Date of mailing (day/month/year) 13 MAY 2005
FOR FURTHER ACTION See paragraph 2 below		
International application No. PCT/IL04/00923	International filing date (day/month/year) 06 October 2004 (06.10.2004)	Priority date (day/month/year) 07 October 2003 (07.10.2003)
International Patent Classification (IPC) or both national classification and IPC IPC(7): A61B 17/56 and US Cl.: 606/72, 80		
Applicant DISC-O-TECH MEDICAL TECHNOLOGIES, LTD		

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application


2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/ US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P O Box 1450 Alexandria, Virginia 22313-1450 Telephone No. (703) 305-3230	Authorized officer  David Comstock Telephone No. (571) 272-4710
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Form PCT/ISA 237 (cover sheet) (January 2004)

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INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/IL04/00923

Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing
☐ contained in international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

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Box No. V Reasoned statement under Rule 43 *bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims <u>3-12, 15, 25 and 34</u>	YES
	Claims <u>1, 2, 13, 14, 16-24, 26-33 and 35-72</u>	NO
Inventive step (IS)	Claims <u>NONE</u>	YES
	Claims <u>1-72</u>	NO
Industrial applicability (IA)	Claims <u>1-72</u>	YES
	Claims <u>NONE</u>	NO

2. Citations and explanations:

Please See Continuation Sheet

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PCT/IL04/00923

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

V. 2. Citations and Explanations:

Claims 1, 2, 13, 14, 16-24, 26-33 and 35 lack novelty under PCT Article 33(2) as being anticipated by KUSLICH et al. (US 5,445,639 A).

KUSLICH et al. disclose a surgical reamer 22 comprising an elongate body, and an expandable head 24 having variable radial dimensions (see, e.g. Figures 11 and 12). The head rotates to crush or drill bone and form an opening therein. The device includes a sleeve that serves to limit the depth the device can be inserted into the bone. The device could be inflated, i.e., filled with air, if so desired. The device could be rotated in either direction and configured to remove different amounts of bone in each direction. The end can serve as a shearing-type drilling device at its outer circumferential vertex. (See Figures 5-14 and column 3, lines 6-16).

Claims 1, 2, 13, 14, 16-24, 26-33 and 35 lack novelty under PCT Article 33(2) as being anticipated by SUDDABY (US 6,224,604 B1).

SUDDABY discloses a surgical reamer 10 comprising an elongate body 12, and an expandable head 20 having variable radial dimensions. The head rotates to crush or drill bone and form an opening therein. The device includes a sleeve 16. The top end 28 of the sleeve is capable of limiting the depth that the device is inserted into bone. The sleeve could be inflated, i.e., filled with air, if so desired. The device could be rotated in either direction and configured to remove different amounts of bone in each direction. The end can serve as a shearing-type drilling device at its effective outer circumferential vertex. (See Figures 1-4 and column 2, lines 20-60).

Claims 36-72 lack novelty under PCT Article 33(2) as being anticipated by ROSENBERG (US 5,374,269 A)

ROSENBERG discloses methods and instruments for ACL reconstruction comprising forming a tunnel with an expansion region in bone, inserting soft material into the region, and fixating soft tissue in the tunnel. The invention includes various modes of attachment comprising interference means, ingrowth means, cementing, etc. Materials for the attachment means comprise any known material for such devices including autogenous, lyophilized, and synthetic bone. The invention includes various ligaments spanning between the attachment means. (See entire document.)

Claims 3-12, 15, 25 and 34 lack an inventive step under PCT Article 33(3) as being obvious over KUSLICH et al. (US 5,445,639 A).

KUSLICH et al. disclose the claimed invention except for disposing the axis of the device at an offset or eccentric location. It would have been obvious to a person of ordinary skill in the art to dispose the axis at an offset or eccentric location as this merely involves the relocation of parts of the invention, which only requires routine skill. Moreover, it is old and well-known to provide eccentric reaming tools for more precise and efficient reaming.

Claims 3-12, 15, 25 and 34 lack an inventive step under PCT Article 33(3) as being obvious over SUDDABY (US 6,224,604 B1).

SUDDABY discloses the claimed invention except for disposing the axis of the device at an offset or eccentric location. It

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INTERNATIONAL SEARCHING AUTHORITY**

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Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

would have been obvious to a person of ordinary skill in the art to dispose the axis at an offset or eccentric location as this merely involves the relocation of parts of the invention, which only requires routine skill. Moreover, it is old and well-known to provide eccentric reaming tools for more precise and efficient reaming.

Claims 1-72 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.